

REMARKS

The Office Action mailed on March 30, 2006 has been given careful consideration by applicant. Reconsideration of the application is requested in view of the amendments and comments herein. Claims 1, 10, 11, 12, 16, 18, and 20 have been amended. Claim 2 has been cancelled and claim 21 has been added.

The Office Action

Claims 3, 4, 5, 10, and 11 are objected to because of minor informalities;

Claims 1-2, 10-13 and 15-20 are rejected under 35 U.S.C. §102(b) as being anticipated by Kubota (US Patent No. 6,041,323);

Claims 3-7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Gilfillan et al. (US PG Pub. No. 2002/0165856);

Claims 8-9 are rejected under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Withgott et al. (US Patent No. 5,748,805); and

Claim 14 is rejected under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Cofino et al. (US PG Pub. No. 2005/0187931).

Objection

The Examiner has objected to claims 3, 4, 5, 10, and 11 in their current form. Claims 3, 4, 5, and 11 contain reference characters (g), (h), (i) and (j) which are also contained in claim 10, but the invention being described in claim 10 regarding these reference characters is different than of claims 3, 4, 5, and 11. Claims 3, 4, 5, 10, and 11 have been amended herein to cure such informalities and are now corrected.

Anticipation Rejection

The Examiner has rejected claims 1-2, 10-13 and 15-20 under 35 U.S.C. §102(b) as being anticipated by Kubota (US Patent No. 6,041,323). This rejection should be withdrawn for at least the following reasons. Kubota does not teach or suggest the subject invention as set forth in the subject claims.

As amended, independent claim 1 recites a method for identifying output documents similar to an input document. A predefined number of keywords are identified from a first list of rated keywords extracted from the input document to define a list of best keywords;

the list of best keywords having a rating greater than other keywords in the first list of keywords except for keywords belonging to a domain specific dictionary of words and having no measurable linguistic frequency. A query is formulated using the list of best keywords and the query is performed to assemble a first set of output documents. Lists of keywords are identified for each output document in the first set of documents and a measure of similarity between the input document and each output document in the first set of documents is computed. A second set of documents is defined with each document in the first set of documents for which its computed measure of similarity with the input document is greater than a predetermined threshold value; wherein the list of best keywords has a maximum number of keywords less than the number of keywords in the list of best keywords that are identified as belonging to a domain specific dictionary of words and having no measurable linguistic frequency. Each document in the second set of documents is identified as being one of a match, a revision, and a relation of the input document. Kubota does not teach or suggest such claimed aspects of the subject invention.

More particularly, Kubota does not teach or suggest identification of a second set of documents (e.g., output documents) as being one of a match, a revision, and a relation of the input document. Instead, Kubota merely arranges located documents in order of evaluation. See column 2, lines 64-65. Such arrangement does not identify the documents as one of a match, a revision, and a relation of the input document and Kubota does not teach or suggest such identification. Thus, Kubota does not teach or suggest this limitation as recited in the subject claims.

As amended, independent claim 16 (and similarly independent claim 18) recites a method for computing ratings of keywords extracted from an input document. A determination is made as to whether each keyword in the list of keywords exists in a domain specific dictionary of words. A frequency of occurrence in the input document for each keyword in the list of keywords is determined. For each keyword identified that exists in the domain specific dictionary of words, each keyword is assigned its linguistic frequency if one exists from a database of linguistic frequencies defined using a collection of documents. A linguistic frequency is assigned to a predefined small value if one does not exist in the database of linguistic frequencies. For each keyword that was not identified in the domain specific dictionary of words at, each keyword is assigned its linguistic frequency

if one exists in the database of linguistic frequencies. For each keyword in the list of keywords to which a term frequency and a linguistic frequency are assigned, a rating corresponding to its importance in the input document that is a function of its frequency of occurrence in the input document and its frequency of occurrence in the collection of documents is computed. A query reduction is performed by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords. Kubota does not teach or suggest such claimed aspects of the subject invention.

More particularly, Kubota does not teach or suggest performing a query reduction by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords. As conceded by the examiner in the Office Action dated March 30, 2006, Kubota does not teach performing a query reduction as mentioned above. See Office Action, page 11, paragraph 2.

Moreover, this limitation is not taught or suggested by Gilfillan as contended by the examiner. Although Gilfillan teaches structuring and refining searches over a wide array of disparate data sources, it does not teach or suggest performing a query reduction by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords, as recited in the subject claims.

As amended, independent claim 20 recites an article of manufacture wherein each document in the second set of documents is identified as being one of a match, a revision, and a relation of the input document. In addition, a query reduction is performed if the second set of document contains an insufficient number of output documents by removing at least one keyword in the list of best keywords that is not the keyword that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency. For at least the reasons mentioned above, Kubota does not teach or suggest these limitations.

For at least the aforementioned reasons, Kubota does not teach or suggest the subject invention as recited in independent claims 1, 16, 18 or 20 (or claims 2, 10-13, 15-

17, and 19 which respectively depend therefrom). Accordingly, withdrawal of this rejection is respectfully requested.

First Obviousness Rejection

The examiner has rejected claims 3-7 under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Gilfillan et al. (US PG Pub. No. 2002/0165856). This rejection should be withdrawn for at least the following reasons. Claims 3-7 depend from independent claim 1, and Gilfillan et al. does not make up for the aforementioned deficiencies of Kubota regarding performing a query reduction by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords. Thus, for at least the reasons discussed above with respect to claim 1, the combination of Kubota and Gilfillan do not teach or suggest the subject claims. Accordingly, the rejection of this claim should be withdrawn.

Second Obviousness Rejection

The examiner has rejected claims 8-9 under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Withgott et al. (US Patent No. 5,748,805). This rejection should be withdrawn for at least the following reasons. Claims 8-9 depend from independent claim 1, and Withgott et al. does not make up for the aforementioned deficiencies of Kubota regarding performing a query reduction by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords. Thus, for at least the reasons discussed above with respect to claim 1, the combination of Kubota and Withgott et al. do not teach or suggest the subject claims. Accordingly, the rejection of this claim should be withdrawn.

Third Obviousness Rejection

The examiner has rejected claim 14 under 35 U.S.C. §103(a) as being unpatentable over Kubota in view of Cofino et al. (US PG Pub No. 2005/0187931). This rejection should be withdrawn for at least the following reasons. Claim 14 depends from independent claim 1, and Cofino et al. does not make up for the aforementioned deficiencies of Kubota

regarding performing a query reduction by removing at least one keyword in the list of best keywords that is identified as belonging to a domain specific dictionary and having no measurable linguistic frequency if an insufficient number of results are obtained from the list of keywords. Thus, for at least the reasons discussed above with respect to claim 1, the combination of Kubota and Cofino et al. do not teach or suggest the subject claim. Accordingly, the rejection of these claims should be withdrawn.

CONCLUSION

For the reasons detailed above, it is submitted that the claims in the subject application are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.


In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Mark Svat, at Telephone Number (216) 861-5582.

Respectfully submitted,

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6/30/06

Date



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